

High Build ESD Industrial Flooring

201-d AGV PumaESD

High Build Dissipative ESD System

revised 5/2/23



Technical Datasheet

DESCRIPTION

201-d AGV PumaESD® is a **static dissipative**, high build (40-50 mils), very low odor, high build floor coating system.

The flooring consists of a primer coat, two 15-20 mil intermediate coats, and a three-component, chemical resistant, aliphatic polyester ESD urethane top coat. The surface has a highly abrasion resistant finish for urethane wheels.

USES:

201-d AGV PumaESD® is recommended for AGV (automatic guided vehicles) and AMR (Autonomous Mobile Robot) traffic. The system provides a smooth, consistent and cleanable surface. It also prevents the damaging effects of static charge buildup on the vehicles.

ADVANTAGES:

- Covers minor imperfections in the substrate.
- Extremely low, non-offensive odor.
- Consistent resistance to ground without the need of a ground plane primer utilizing conductive particulates and polymers
- Body Voltage Generation (BVG) below 15 volts with ground straps.
- Reparable: Easy to repair, or re-coat with top coat only, when required.

ELECTRICAL PROPERTIES:

- Typical resistance readings would be 10e5 to 10e8 ohms.
- Can be used to meet the recommendations set forth in ANSI ESD S20.20-2014 standards.
- Resistance: This product is meets values defined in test method EOS/ ESD Association ESD STM S7.1-2005.
- Dissipates a 5000-volt charge to 0 volts in less than 0.1 seconds.
- Maintains ESD properties and not dependent humidity for proper conductivity (unlike carbon fiber systems).
- *To assure proper contact to floor surface, machines must have properly installed ground straps.
- GROUNDING: System may be easily grounded, every 1000 sf, by means of conductive copper ground tape, applied before or after final coat.

DURABILITY

Excellent resistance to abrasion from all types AGV (automatic guided vehicles) and AMR (autonomous mobile robots).

COMPOSITION

Non-toxic static conductive, polyurethane resin system combined with glass bead aggregates. Complies with VOC regulations for industrial maintenance coatings in the OTC and CA.

CURED PROPERTIES*:	Test Method	Results
Properties		
Conductivity Resistance Static Charge Decay	ANSI ESD-7.1 MIL-B-81705B	10e5 to 10 e8 ohms 5000V to 0, <0.1sec
Abrasion Resistance	ASTM D6090	75 mg
Tensile Strength	ASTM D638	2600 PSI
Compressive Strength	ASTM D695	8700 PSI
Flexural Stength	ASTM D790	10,500 PSI
Hardness (shore D)	ASTM D2240	75/70
Adhesion	ACI503R	300 psi

APPEARANCE

SHEEN: Semi-Gloss.

Slip Resistant: Meets ADA Standard - Coefficient of Friction (.6) Surface is easy to clean.

APPLICATION

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m AGV~PumaESD}^{\circ}$ is installed by certified applicators throughout the LLS A

SURFACE PREPARATION

To be assured of maximum adhesion and properties from any PumaCRETE $^{\otimes}$ resin products the correct surface is essential. Please refer to technical data sheet "Surface Preparation".

STORAGE, MIXING & APPLICATION TEMPERATURE

The storage, mixing and application conditions can affect the quality of the finish produced. Optimum storage and application temperature are 70°F .

CURE SCHEDULE (70 deg F)

24 hours (foot traffic), 48 hrs Full cure (heavy traffic)

MAINTENANCE

Regular cleaning of the applied system is recommended in order to maintain slip resistant properties and cosmetics. Normal cleaning agents (such as Simple Green) w/ auto floor scrubber.

CHEMICAL RESISTANCE

Excellent resistances to organic and inorganic acids, alkalis, fuel and hydraulic oils, aromatic and aliphatic solvents.

COLORS AVAILABLE

Standard colors: Std color is Medium Gray (also available in additional colors—see PumaCRETE ESD color chart.

WARRANTY

1 year (refer to PUMA-CRETE® ESD warranty terms and conditions)

CONDITIONS OF USAGE:

Installation of all products purchased must be by professional installers periodically published by PUMA-CRETE or otherwise approved by PUMA-CRETE in writing. Modification to any of PUMA-CRETE's products voids the warranty. The installer shall maintain a written contemporaneous record of field conditions (including, without limitation, surface and atmospheric conditions, usage rates, and lot numbers of products installed). PUMA-CRETE reserves the right of inspection of any installed product, installation and maintenance records and records of field conditions and may conduct additional testing as is reasonably required to investigate any warranty claims. Warranty shall only apply for products or materials that have been paid for in full.